AMENDMENTS TO THE CLAIMS

This listing replaces all prior listings, and versions, of the claims:

1 – 53. (Canceled).

54. (Currently Amended) A method for dynamic slip control in a scheduling system, the method comprising:

a processor receiving a first interrupt;

the processor retrieving from a memory ~~obtaining the~~ a value of a first clock time when the first interrupt is received;

the processor computing a first time interval ~~until~~ between said first clock time value and a scheduled time for a second interrupt ~~is scheduled~~;

the processor retrieving from the memory ~~obtaining the~~ a value of a second clock time when computation of the first time interval is ~~computed~~ complete;

the processor computing a second time interval~~, based on said first time interval~~ between said first clock time value and said second clock time value;

the processor computing a third time interval by subtracting said second time interval from said first time interval; and

the processor scheduling said second interrupt to arrive at or after an expiration of said ~~second~~ third time interval.

55. (Currently Amended) A method according to claim 54, further comprising: after the act of obtaining the value of a first clock time when the first interrupt is received and before the act of obtaining the value of a second clock time when computation of the first time interval is ~~computed~~ complete, updating a state variable of said scheduling system.

56. (Currently Amended) A method according to claim 54, further comprising: after the act of obtaining the value of a first clock time when the first interrupt is received and before the act of obtaining the value of a second clock time when computation of the first time interval is ~~computed~~ complete, interacting with a physical environment via an interface circuit.

57. (Previously Presented) A method according to claim 56, wherein said act of interacting with the physical environment comprises receiving a signal from the physical environment indicative of a state of the physical environment.

58. (Previously Presented) A method according to claim 56, wherein said act of interacting with the physical environment comprises receiving an instruction from the physical environment to modify a state of the scheduling system.

59. (Currently Amended) A method according to claim 54, further comprising estimating a latency of receipt of said first interrupt, and wherein said act of computing said second and said third time ~~interval~~ intervals is further based on said estimated latency.

60. (Previously Presented) A method according to claim 59, wherein said first interrupt is received from a first platform and the act of estimating said latency comprises analyzing a performance characteristic of said platform.

61. (Previously Presented) A method according to claim 59, wherein said first interrupt is received from a first platform and the act of estimating said latency comprises accessing statistical information regarding a performance characteristic of said platform.

62. (Currently Amended) A method according to claim 54, further comprising estimating a processing time for updating a state of said scheduling system, and wherein said act of computing said second and said third time ~~interval~~ intervals is further based on said estimated time.

63. (Previously Presented) A method according to claim 62, wherein the act of estimating said processing time comprises analyzing a performance characteristic of said scheduling system.

64. (Previously Presented) A method according to claim 62, wherein the act of estimating said processing time comprises accessing statistical information regarding a performance characteristic of said scheduling system.

65. (Currently Amended) A computer program product for use with a scheduling system comprising a computer readable medium encoded with a program module, the program module including instructions for directing the scheduling system to:

receive a first interrupt;

obtain ~~the~~ a value of a first clock time when the first interrupt is received;

compute a first time interval ~~until~~ between said first clock time value and a scheduled time for a second interrupt ~~is scheduled~~;

obtain ~~the~~ a value of a second clock time when computation of the first time interval is ~~computed~~ complete;

compute a second time interval~~, based on said first time interval~~ between said first clock time value and said second clock time value;

compute a third time interval by subtracting said second time interval from said first time interval; and

schedule said second interrupt to arrive at or after an expiration of said ~~second~~ third time interval.

66. (Currently Amended) A computer program product according to claim 65, wherein the program module further includes instructions directing the scheduling system to update a state variable of said scheduling system after the act of obtaining the value of a first clock time when the first interrupt is received and before the act of obtaining the value of a second clock time when computation of the first time interval is ~~computed~~ complete.

67. (Currently Amended) A computer program product according to claim 65, wherein the program module further includes instructions directing the scheduling system to interact with a physical environment via an interface circuit after the act of obtaining the value of a first clock time

when the first interrupt is received and before the act of obtaining the value of a second clock time when computation of the first time interval is ~~computed~~ complete.

68. (Previously Presented) A computer program product according to claim 67, wherein said instructions directing the scheduling system to interact with the physical environment comprise instructions directing the scheduling system to receive a signal from the physical environment indicative of a state of the physical environment.

69. (Previously Presented) A computer program product according to claim 67, wherein said instructions directing the scheduling system to interact with the physical environment comprise instructions directing the scheduling system to receive an instruction from the physical environment to modify a state of the scheduling system.

70. (Currently Amended) A computer program product according to claim 65, wherein the program module further includes instructions directing said scheduling system to estimate a latency of receipt of said first interrupt, and wherein said instructions directing the scheduling system to compute said second and said third time ~~interval~~ intervals further include instructions to compute said second time interval based on said estimated latency.

71. (Previously Presented) A computer program product according to claim 70, wherein said first interrupt is received from a first platform and the instructions directing said scheduling system to estimate said latency comprise instructions directing said scheduling system to analyze a performance characteristic of said platform.

72. (Previously Presented) A computer program product according to claim 70, wherein said first interrupt is received from a first platform and the instructions directing said scheduling system to estimate said latency comprise instructions directing said scheduling system to access statistical information regarding a performance characteristic of said platform.

73. (Currently Amended) A computer program product according to claim 65, wherein the program module further comprises instructions directing the scheduling system to estimate a processing time for updating a state of said scheduling system, and wherein said instructions directing the scheduling system to compute said second time interval further include instructions to computer said second and said third time ~~interval~~ intervals based on said estimated time.

74. (Previously Presented) A computer program product according to claim 73, wherein the instructions directing the scheduling system to estimate said processing time include instructions directing the scheduling system to analyze a performance characteristic of said scheduling system.

75. (Previously Presented) A computer program product according to claim 73, wherein the instructions directing the scheduling system to estimate said processing time comprise instructions directing the scheduling system to access statistical information regarding a performance characteristic of said scheduling system.

76. (Currently Amended) A scheduling system employing dynamic slip control, the scheduling system
comprising:

at least one input adapted to receive an interrupt;

at least one timer circuit; and

a processor coupled to said timer circuit and said input, the processor adapted to obtain ~~the~~ a value of a first clock time when ~~the~~ a first interrupt is received, compute a first time interval ~~until~~ between said first clock time value and a scheduled time for a second interrupt ~~is scheduled~~, obtain ~~the~~ a value of a second clock time when computation of the first time interval is ~~computed~~ complete, compute a second time interval~~, based on said first time interval~~ between said first clock time value and said second clock time value, compute a third time interval by subtracting said second time interval from said first time interval, and schedule said second interrupt to arrive at or after an expiration of said ~~second~~ third time interval.

77. (Currently Amended) A system according to claim 76, wherein the processor is further adapted to update a state variable of said scheduling system after the act of obtaining the value of a first clock when the first interrupt is received and before the act of obtaining the value of a second clock time when computation of the first time interval is ~~computed~~ complete.

78. (Currently Amended) A system according to claim 76, further comprising a physical environment coupled to said processor and wherein the processor is further adapted to interact with the physical environment via an interface circuit after the act of obtaining the value of a first clock time when the first interrupt is received and before the act of obtaining the value of a second clock time when computation of the first time interval is ~~computed~~ complete.

79. (Previously Presented) A system according to claim 78, wherein the processor is further adapted to receive a signal from the physical environment indicative of a state of the physical environment.

80. (Previously Presented) A system according to claim 78, wherein the processor is further adapted to receive an instruction from the physical environment to modify a state of the scheduling system.

81. (Currently Amended) A system according to claim 76, wherein the processor is further adapted to estimate a latency of receipt of said first interrupt, and compute said second and said third time ~~interval~~ intervals based further on said estimated latency.

82. (Previously Presented) A system according to claim 81, further comprising a platform adapted to send said first interrupt, said processor further adapted to analyze a performance characteristic of said platform.

83. (Previously Presented) A system according to claim 81, further comprising a platform adapted to send said first interrupt, said processor further adapted to access statistical information regarding a performance characteristic of said platform.

84. (Currently Amended) A system according to claim 76, wherein the processor is further adapted to estimate a processing time for updating a state of said scheduling system, and compute said second and said third time ~~interval~~ intervals based further on said estimated time.

85. (Previously Presented) A system according to claim 84, said processor further adapted to analyze a performance characteristic of said scheduling system.

86. (Previously Presented) A system according to claim 84, said processor further adapted to access statistical information regarding a performance characteristic of said scheduling system.